

The School Bus Collision Investigation Newsletter

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School Bus Driver Sight Lines and Field of View Investigation

The School Bus Collision Investigation Team (SBCIT) must carefully both the school bus driver sightlines and the driver field of vision (FOV). Driver sightline and field of vision of the student pedestrian is a critical factor in the collision investigation. This newsletter will address school bus driver sightlines and field of view with respect to a collision with a pedestrian who was in front of the school bus when struck down.

Determining School Bus Driver Sightline (DSL)

While the height of eye for the automobile driver is usually 3.5 ft. above the ground or street level the eye height school bus drivers is at least 7.6 ft. How to measure drive eye height should be done while the school bus driver is seated and sitting erect with the three-way lap belt installed the school bus driver who was involved in the collision event.

The following measurements should be taken:

DSL1. Height from ground (street level) to base of driver seat. NOTE: One SBCIT member may use a yardstick to hold in position while another SBCIT member photographs each of these measurements from two perspectives:

- Closeup photograph of yardstick measurement that is indicated in the investigation report.
- While backing off take a side view photograph of yardstick measurement that shows a full seated driver view as indicated in the investigation report. Photo will show ground level, stepwell area, bus floor and base of driver seat. (Be sure to use flash to obtain high contrast photographs. Take at least two for each viewpoint and number all pictures taken in a collision scene log book.)

DSL2. Height of base of driver seat to level of seat contact height of the underside of the thighs. (Refer to diagram measurement "L" above.) NOTE: One SBCIT member may use a yardstick to hold in position while another SBCIT member photographs each of these measurements from two perspectives:

- Closeup photograph of yardstick measurement that is indicated in the investigation report.
- While backing off take a side view photograph of yardstick measurement that shows a full seated driver view as indicated in the investigation report. Photo will show bus floor area and the driver seat base as well as a full view of the driver seated there. (Be sure to use flash to obtain high contrast photographs. Take at least two for each view point and number all pictures taken in a collision scene log book.)
- Average distance from bus floor to under thigh will be (15" minimum to 21" maximum with an average of 18").

DSL3. Height from seat height to driver eye level. (Not shown in the diagram. Draw a line across the face in the middle of the ears as shown and that will be the approximate position of the eyes. When taking photographs this may vary with the individual school bus driver. NOTE: One SBCIT member may use a foot ruler to hold in position while another SBCIT member photographs each of these measurements from two perspectives:

- Closeup photograph of foot ruler measurement that is indicated in the investigation report.
- While backing off take a side view photograph of foot ruler measurement that shows a full seated driver view as indicated in the investigation report. Photo will show bus floor area and the driver seat base as well as a full view of the driver seated there. (Be sure to use flash to obtain high contrast photographs. Take at least two for each viewpoint and number all pictures taken in a pedestrian collision scene log book.)

